United Nations ECE/TRANS/WP.29/2018/61

Economic and Social Council

Distr.: General
3 April 2018

Original: English

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

175th session
Geneva, 19-22 June 2018
Item 4.8.9 of the provisional agenda
1958 Agreement:
Consideration of draft amendments to existing UN Regulations submitted by GRRF

Proposal for Supplement 1 to UN Regulation No. 140 (Electronic Stability Control (ESC))

Submitted by the Working Party on Brakes and Running Gear*

The text reproduced below was adopted by the Working Party on Brakes and Running Gear (GRRF) at its eighty-sixth session (ECE/TRANS/WP.29/GRRF/86, para. 12). It is based on ECE/TRANS/WP.29/GRRF/2018/3. It is submitted to the World Forum for Harmonization of Vehicle Regulations (WP.29) and to the Administrative Committee AC.1 for consideration at their June 2018 sessions.

* In accordance with the programme of work of the Inland Transport Committee for 2018–2019 (ECE/TRANS/274, para. 123 and ECE/TRANS/2018/21/Add.1, cluster 3.1), the World Forum will develop, harmonize and update UN Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

GE.18-05164(E)

1805164

Please recycle

Supplement 1 to UN Regulation No. 140 (Electronic Stability Control (ESC))

Paragraph 5.1., amend to read:

"5.1. Vehicles shall be equipped with an ESC system that meets the functional requirements specified in paragraph 6. and the performance requirements in paragraph 7. under the test procedures specified in paragraph 9. and under the test conditions specified in paragraph 8. of this Regulation."

Annex 4,

Paragraph 2.1., amend to read:

"2.1. The validity of the applied modelling and simulation tool shall be verified by means of comparisons with practical vehicle tests. The tests utilised for the validation shall be the dynamic manoeuvres of paragraph 9.9. of this Regulation.

During the tests, the following motion variables, as appropriate, shall be recorded or calculated in accordance with ISO 15037 Part 1:2006: General conditions for passenger cars or Part 2:2002: General conditions for heavy vehicles and buses (depending on the vehicle category):

(a) Steering-wheel angle (δH);

(b) Longitudinal velocity (vX);

(c) Sideslip angle (β) or lateral velocity (vY) – (optional);

(d) Longitudinal acceleration (aX) – (optional);

(e) Lateral acceleration (aY);

(f) Yaw velocity ($d\psi/dt$);

(g) Roll velocity ($d\varphi/dt$);

(h) Pitch velocity ($d\theta/dt$);

(i) Roll angle (φ);

(j) Pitch angle (θ)."